

Elk County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Elk County economy.¹

These 13 sectors have a total direct output of approximately **\$47.6 million** and support **383 jobs** in Elk County. Running the model for all 13 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Elk County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	382.9	24.99%	\$11,126,349	18.29%	\$47,643,538	78.31%
Indirect Effect	39.5	2.58%	\$1,824,340	3.00%	\$4,541,472	7.46%
Induced Effect	32.8	2.14%	\$1,632,026	2.68%	\$3,253,267	5.35%
Total Effect	455.2	29.71%	\$14,582,715	23.97%	\$55,438,278	91.12%

As shown in the above table, agriculture, food, and food processing sectors support **455 jobs**, or **29.71%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$55.4 million**, **roughly 91.12% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately **\$14.6 million**, or **23.97% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **23.97% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3A3KB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **315 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Elk County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	314.9	\$36,820,696
All other crop farming	19.3	\$1,417,850
Landscape and horticultural services	11.8	\$368,802
Veterinary services	9.8	\$760,504
Truck transportation	9.2	\$1,360,320
Greenhouse, nursery, and floriculture production	6.9	\$709,926
Extraction of natural gas and crude petroleum	6.3	\$733,199
Grain farming	6.0	\$2,142,006
Animal production, except cattle and poultry and eggs	5.5	\$640,596
Wholesale trade	5.2	\$773,833

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$36.8 million** to the Elk County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	314.9	\$36,820,696
Oilseed farming	4.0	\$3,964,546
Grain farming	6.0	\$2,142,006
All other crop farming	19.3	\$1,417,850
Truck transportation	9.2	\$1,360,320
Owner-occupied dwellings	0.0	\$1,150,063
Wholesale trade	5.2	\$773,833
Veterinary services	9.8	\$760,504
Extraction of natural gas and crude petroleum	6.3	\$733,199
Greenhouse, nursery, and floriculture production	6.9	\$709,926

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Elk County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	4.0	\$3,964,546.27
Grain farming	6.0	\$2,142,006.19
Fruit farming	0.6	\$37,981.12
Tree nut farming	0.2	\$29,656.05
Greenhouse, nursery, and floriculture production	6.9	\$709,926.50
All other crop farming	19.3	\$1,417,849.68
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	314.9	\$36,820,695.68
Dairy cattle and milk production	1.1	\$355,246.44
Poultry and egg production	0.2	\$160,923.43
Animal production, except cattle and poultry and eggs	5.5	\$640,595.70
Bread and bakery product, except frozen, manufacturing	2.6	\$234,805.85
Veterinary services	9.8	\$760,503.69
Landscape and horticultural services	11.8	\$368,801.81

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Elk County, the retail sector was omitted.